



ENTERED

PCT

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,783

DATE: 04/29/2002

TIME: 12:02:48

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

4 <110> APPLICANT: COCHE, Thierry
 5 CASSERT, Jean-Pol
 6 GAULIS, Swann Romain Jean-Thomas
 7 VINALS Y DE BASSOLS Carlotta
 9 <120> TITLE OF INVENTION: Human Tumor-Associated LAK-4P Related
 10 Polynucleotides and Polypeptides and Their Uses
 13 <130> FILE REFERENCE: BC45263
 C--> 15 <140> CURRENT APPLICATION NUMBER: US/10/089,783
 C--> 15 <141> CURRENT FILING DATE: 2002-04-01
 15 <150> PRIOR APPLICATION NUMBER: GB 9923154.0
 16 <151> PRIOR FILING DATE: 1999-09-30
 18 <150> PRIOR APPLICATION NUMBER: GB 0016839.3
 19 <151> PRIOR FILING DATE: 2000-07-07
 21 <160> NUMBER OF SEQ ID NOS: 72
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 25 <210> SEQ ID NO: 1
 26 <211> LENGTH: 2407
 27 <212> TYPE: DNA
 28 <213> ORGANISM: Artificial Sequence
 30 <220> FEATURE:
 31 <223> OTHER INFORMATION: primer
 33 <400> SEQUENCE: 1
 34 tggggaggca gaaggcagac tgatcaacttg aggccaggag tttgagacct catgtctaaa 60
 35 aaaaaaaaaat tctgtgaggt gagttttatt gttattccct ctctacagat atggaaactg 120
 36 aggctgagaa tcagaacccat tcacaagaca aaaatccccc agttggcaga tccagggttg 180
 37 caagccaggc ctgtgcagcc ccaaaaccag tgcttggtta accactgtgt ggtgaccaca 240
 38 ccgtccagg ccaacagctt ggggctaagt cttcacgttg cctttcacca ttaaataata 300
 39 gggctgccct ttgttgaagc cctgcaactcc cagtgaaggc cataataacc ttcagggtgtt 360
 40 ctgctttctg ccttctctag catggccaag tatttccgga acaacttcat taatccccac 420
 41 atttactccg gagggatcac caagctgata ttttgctggg acttcaactgt cactcatgaa 480
 42 aaagctgtga agctaaaaca gaagaatctt agcactgaga taaggggagaa cctgtcagag 540
 43 ctccgtcagg agaattccaa gttgaagctt aatcagctgc tgaccgcgtt ctctgcctac 600
 44 atggtagcct ggggtgtctc tacaggagtg gccatagcct gctgtgcagc cgtttattac 660
 45 ctggctgagt acaacttaga gttcctgaag acacacagta accctggggc ggtgctgtta 720
 46 ctgcctttcg ttgtgtcctg cattaatctg gccgtgccat gcattctact catgttcagg 780
 47 cttgtggaga ggtacgagat gccacggcac gaagtctacg ttctcctgat ccgaaacatc 840
 48 tttttgaaaa tatcaatcat tggcattctt tgttactatt ggctcaaacac cgtggccctg 900
 49 tctgggtgaag agtggttgga aaccctcatt ggccaggaca tctaccgggt ccttctgatg 960
 50 gattttgtgt tctctttagt caattccttc ctgggggagt ttctgaggag aatcattggg 1020
 51 atgcaactga tcacaagtct tggccttcag gagtttgaca ttgccaggaa cgttctagaa 1080
 52 ctgatctatg cacaaactct ggtgtggatt ggcatcttct tctgccccct gctgcccttt 1140
 53 atccaaatga ttatgctttt catcatgttc tactccaaaa atatcagcct gatgatgaat 1200
 54 ttccagcctc cgagcaaagc ctggcgggcc tcacagatga tgactttctt catcttcttg 1260

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,783

DATE: 04/29/2002

TIME: 12:02:48

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

```

55 ctctttttcc catccttcac cggggtcttg tgcaccctgg ccatcaccat ctggagattg 1320
56 aagccttcag ctgactgtgg cccttttcga ggtctgcctc tcttcattca ctccatctac 1380
57 agctggatcg acaccctaag tacacggcct ggctacctgt gggttgtttg gatctatcgg 1440
58 aacctcattg gaagtgtgca cttctttttc atcctcacc ctcattgtgct aatcatcacc 1500
59 tatctttact ggcagatcac agagggaagg aagattatga taaggctgct ccatgagcag 1560
60 atcattaatg agggcaaaga taaaatgttc ctgatagaaa aattgatcaa gctgcaggat 1620
61 atggagaaga aagcaaacc cagctcactt gttctggaaa ggagagagg ggagcaacaa 1680
62 ggctttttgc atttggggga acatgatggc agtcttgact tgcgatctag aagatcagtt 1740
63 caagaaggta atccaagggc ctgatgactc ttttggtaac cagacaccaa tcaaataagg 1800
64 ggaggagacg aaaatggaat gatttcttcc atgccacctg tgcctttagg aactgcccag 1860
65 aagaaaatcc aaggctttag ccaggagcgg aaactgacta ccatgtaatt atcaaagtaa 1920
66 aattgggcat tccatgctat ttttaatacc tggattgctg atttttcaag acaaaatact 1980
67 tggggttttc caataaagat tgttgtaata ttgaaatgag cctacaaaaa cctaggaaga 2040
68 gataactagg gaataatgta tattatcttc aagaaatgtg tgcaggaatg attggttctt 2100
69 agaaatctct cctgccagac ttcccagacc tggcaaagg ttagaaactg ttgctaagaa 2160
70 aagtggcca tctgaataa acatgtaata ctccagcagg gatatgaagc ctctgaattg 2220
71 tagaacctgc atttatattg gactttgaac taaagacatc ccccatgtcc caaagggtga 2280
72 atacaaccag aggtctcatc tctgaacttt cttgcgtact gattacatga gtctttggag 2340
73 tcgggggatg aggaggttct gccctgtga ggtgttatac atgaccatca aagtcctacg 2400
74 tcaagct 2407

```

76 <210> SEQ ID NO: 2

77 <211> LENGTH: 460

78 <212> TYPE: PRT

79 <213> ORGANISM: Artificial Sequence

81 <220> FEATURE:

82 <223> OTHER INFORMATION: primer

84 <400> SEQUENCE: 2

```

85 Met Ala Lys Tyr Phe Arg Asn Asn Phe Ile Asn Pro His Ile Tyr Ser
86 1 5 10 15
87 Gly Gly Ile Thr Lys Leu Ile Phe Cys Trp Asp Phe Thr Val Thr His
88 20 25 30
89 Glu Lys Ala Val Lys Leu Lys Gln Lys Asn Leu Ser Thr Glu Ile Arg
90 35 40 45
91 Glu Asn Leu Ser Glu Leu Arg Gln Glu Asn Ser Lys Leu Thr Phe Asn
92 50 55 60
93 Gln Leu Leu Thr Arg Phe Ser Ala Tyr Met Val Ala Trp Val Val Ser
94 65 70 75 80
95 Thr Gly Val Ala Ile Ala Cys Cys Ala Ala Val Tyr Tyr Leu Ala Glu
96 85 90 95
97 Tyr Asn Leu Glu Phe Leu Lys Thr His Ser Asn Pro Gly Ala Val Leu
98 100 105 110
99 Leu Leu Pro Phe Val Val Ser Cys Ile Asn Leu Ala Val Pro Cys Ile
100 115 120 125
101 Tyr Ser Met Phe Arg Leu Val Glu Arg Tyr Glu Met Pro Arg His Glu
102 130 135 140
103 Val Tyr Val Leu Leu Ile Arg Asn Ile Phe Leu Lys Ile Ser Ile Ile
104 145 150 155 160
105 Gly Ile Leu Cys Tyr Tyr Trp Leu Asn Thr Val Ala Leu Ser Gly Glu
106 165 170 175

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,783

DATE: 04/29/2002

TIME: 12:02:48

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

```

107 Glu Cys Trp Glu Thr Leu Ile Gly Gln Asp Ile Tyr Arg Leu Leu Leu
108          180          185          190
109 Met Asp Phe Val Phe Ser Leu Val Asn Ser Phe Leu Gly Glu Phe Leu
110          195          200          205
111 Arg Arg Ile Ile Gly Met Gln Leu Ile Thr Ser Leu Gly Leu Gln Glu
112          210          215          220
113 Phe Asp Ile Ala Arg Asn Val Leu Glu Leu Ile Tyr Ala Gln Thr Leu
114 225          230          235          240
115 Val Trp Ile Gly Ile Phe Phe Cys Pro Leu Leu Pro Phe Ile Gln Met
116          245          250          255
117 Ile Met Leu Phe Ile Met Phe Tyr Ser Lys Asn Ile Ser Leu Met Met
118          260          265          270
119 Asn Phe Gln Pro Pro Ser Lys Ala Trp Arg Ala Ser Gln Met Met Thr
120          275          280          285
121 Phe Phe Ile Phe Leu Leu Phe Phe Pro Ser Phe Thr Gly Val Leu Cys
122          290          295          300
123 Thr Leu Ala Ile Thr Ile Trp Arg Leu Lys Pro Ser Ala Asp Cys Gly
124 305          310          315          320
125 Pro Phe Arg Gly Leu Pro Leu Phe Ile His Ser Ile Tyr Ser Trp Ile
126          325          330          335
127 Asp Thr Leu Ser Thr Arg Pro Gly Tyr Leu Trp Val Val Trp Ile Tyr
128          340          345          350
129 Arg Asn Leu Ile Gly Ser Val His Phe Phe Phe Ile Leu Thr Leu Ile
130          355          360          365
131 Val Leu Ile Ile Thr Tyr Leu Tyr Trp Gln Ile Thr Glu Gly Arg Lys
132          370          375          380
133 Ile Met Ile Arg Leu Leu His Glu Gln Ile Ile Asn Glu Gly Lys Asp
134 385          390          395          400
135 Lys Met Phe Leu Ile Glu Lys Leu Ile Lys Leu Gln Asp Met Glu Lys
136          405          410          415
137 Lys Ala Asn Pro Ser Ser Leu Val Leu Glu Arg Arg Glu Val Glu Gln
138          420          425          430
139 Gln Gly Phe Leu His Leu Gly Glu His Asp Gly Ser Leu Asp Leu Arg
140          435          440          445
141 Ser Arg Arg Ser Val Gln Glu Gly Asn Pro Arg Ala
142          450          455          460
144 <210> SEQ ID NO: 3
145 <211> LENGTH: 2521
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: primer
152 <400> SEQUENCE: 3
153 tggggaggca gaaggcagac tgatcacttg aggccaggag tttgagacct catgtctaaa      60
154 aaaaaaaaaat tctgtgaggt gagttttatt gttattccct ctctacagat atggaaactg      120
155 aggctgagaa tcagaaccat tcacaagaca aaaatccccc agttggcaga tccaggggtg      180
156 caagccaggc ctgtgcagcc ccaaaaccag tgcttggtta accactgtgt ggtgaccaca      240
157 ccgctccagg ccaacagctt ggggctaagt cttcacgttg cctttcacca ttaaataata      300
158 gggctgcctt ttgttgaagc cctgcactcc cagtgaaggc cataataacc ttcaggtgtt      360

```

RAW SEQUENCE LISTING

DATE: 04/29/2002

PATENT APPLICATION: US/10/089,783

TIME: 12:02:48

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

```

159 ctgctttctg ccttctctag catggccaag tatttccgga acaacttcat taatccccac 420
160 atttactccg gagggatcac caagctgac ttttgctggg acttcaactgt cactcatgaa 480
161 aaagctgtga agctaaaaca gaagaatctt agcactgaga taaggagaa cctgtcagag 540
162 ctccgtcagg agaattccaa gttgacgttc aatcagctgc tgaccgctt ctctgcctac 600
163 atggtagcct gggttgtctc tacaggagtg gccatagcct gctgtgcagc cgtttattac 660
164 ctggctgagt acaacttaga gttcctgaag acacacagta accctggggc ggtgctgtta 720
165 ctgcctttcg ttgtgtcctg cattctggcc gtgccatgca tctactccat gttcaggctt 780
166 gtggagaggt acgagatgcc acggcacgaa gtctacgttc tctgatccg caggggattg 840
167 atgtagttct caagtatggg atgtacagat gggcaggcag tgcacgcaca aaggctcctg 900
168 ggctgaggac gggactgaaa tcatccagcg ttccccttag tcaagctaaa catctttttg 960
169 aaaatatcaa tcattggcat tctttgttac tattggctca acaccgtggc cctgtctggt 1020
170 gaagagtgtt gggaaaccct cattggccag gacatctacc ggctccttct gatggatttt 1080
171 gtgttctctt tagtcaattc ctctctgggg gagtttctga ggagaatcat tgggatgcaa 1140
172 ctgatcacia gtcttggcct tcaggagttt gacattgcca ggaacgttct agaactgatc 1200
173 tatgcacaaa ctctggtgtg gattggcatc ttctctgccc ccctgctgcc ctttatccaa 1260
174 atgattatgc ttttcatcat gttctactcc aaaaatatca gcctgatgat gaatttccag 1320
175 cctccgagca aagcctggcg ggccctcacag atgatgaact tcttcatctt ctgtctcttt 1380
176 ttcccatcct tcaccggggg ctgtgtgccc ctggccatca ccatctggag attgaagcct 1440
177 tcagctgact gtggcccttt tcgaggtctg cctctcttca ttcactccat ctacagctgg 1500
178 atcgacaccc taagtacacg gcctggctac ctgtgggttg tttggatcta tcggaacctc 1560
179 attggaagtg tgcacttctt tttcatctc accctcattg tgctaactat cacctatctt 1620
180 tactggcaga tcacagaggg aaggaagatt atgataaggc tgctccatga gcagatcatt 1680
181 aatgagggca aagataaaat gttcctgata gaaaaattga tcaagctgca ggatatggag 1740
182 aagaaagcaa accccagctc acttggtctg gaaaggagag aggtggagca acaaggcttt 1800
183 ttgcattttg gggaaacatga tggcagctct gacttgcgat ctagaagatc agttcaagaa 1860
184 ggtaatccaa gggcctgatg actctttttg taaccagaca ccaatcaaat aaggggagga 1920
185 gacgaaaatg gaattgattc ttccatgcca cctgtgcctt taggaactgc ccagaagaaa 1980
186 atccaaggct ttagccagga gcggaaactg actaccatgt aattatcaaa gtaaaattgg 2040
187 gcattccatg ctatttttaa tacttgatt gctgattttt caagacaaaa tacttggggt 2100
188 ttccaataa agattgttgt aatattgaaa tgagcctaca aaacctagg aagagataac 2160
189 tagggaataa tgtatattat cttcaagaaa tgtgtgcagg aatgattggt tcttagaat 2220
190 ctctcctgcc agacttccca gacctggcaa aggtttagaa actgttgcta agaaaagtgg 2280
191 tccatcctga ataaacatgt aatactccag cagggatatg aagcctctga attgtagaac 2340
192 ctgcatttat ttgtgacttt gaactaaaga catcccccat gtcccaaagg tggaaataca 2400
193 ccagaggtct catctctgaa ctttcttgcg tactgattac atgagtcttt ggagtcgggg 2460
194 atggaggagg ttctgcccct gtgaggtgtt atacatgacc atcaaagtcc tacgtcaagc 2520
195 t 2521
197 <210> SEQ ID NO: 4
198 <211> LENGTH: 154
199 <212> TYPE: PRT
200 <213> ORGANISM: Artificial Sequence
202 <220> FEATURE:
203 <223> OTHER INFORMATION: primer
205 <400> SEQUENCE: 4
206 Met Ala Lys Tyr Phe Arg Asn Asn Phe Ile Asn Pro His Ile Tyr Ser
207 1 5 10 15
208 Gly Gly Ile Thr Lys Leu Ile Phe Cys Trp Asp Phe Thr Val Thr His
209 20 25 30
210 Glu Lys Ala Val Lys Leu Lys Gln Lys Asn Leu Ser Thr Glu Ile Arg

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/089,783

DATE: 04/29/2002

TIME: 12:02:48

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

```

211          35          40          45
212 Glu Asn Leu Ser Glu Leu Arg Gln Glu Asn Ser Lys Leu Thr Phe Asn
213          50          55          60
214 Gln Leu Leu Thr Arg Phe Ser Ala Tyr Met Val Ala Trp Val Val Ser
215 65          70          75          80
216 Thr Gly Val Ala Ile Ala Cys Cys Ala Ala Val Tyr Tyr Leu Ala Glu
217          85          90          95
218 Tyr Asn Leu Glu Phe Leu Lys Thr His Ser Asn Pro Gly Ala Val Leu
219          100          105          110
220 Leu Leu Pro Phe Val Val Ser Cys Ile Leu Ala Val Pro Cys Ile Tyr
221          115          120          125
222 Ser Met Phe Arg Leu Val Glu Arg Tyr Glu Met Pro Arg His Glu Val
223          130          135          140
224 Tyr Val Leu Leu Ile Arg Arg Gly Leu Met
225 145          150
227 <210> SEQ ID NO: 5
228 <211> LENGTH: 1960
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: primer
235 <400> SEQUENCE: 5
236 atcttttgcg gggacttcac tgtcactcat gaaaaagctg tgaagctaaa acagaagaat 60
237 cttagcactg agataaggga gaacctgtca gagctccgtc aggagaattc caagttgacg 120
238 ttcaatcagc tgctgacccg cttctctgcc tacatggtag cctgggttgt ctctacagga 180
239 gtggccatag cctgctgtgc agccgtttat tacctggctg agtacaactt agagttcctg 240
240 aagacacaca gtaaccctgg ggcgggtgctg ttactgcctt tcgttgtgtc ctgcattaat 300
241 ctggccgtgc catgcatcta ctccatgttc aggcctgtgg agaggtacga gatgccacgg 360
242 cacgaagtct acgttctcct gatccgaaac atctttttga aaatatcaat cattggcatt 420
243 ctttggttact attggtcaa caccgtggcc ctgtctgggt aagagtgttg ggaaaccctc 480
244 attggccagg acatctaccg gctccttctg atggattttg tgttctcttt agtcaattcc 540
245 ttctctgggg agtttctgag gagaatcatt gggatgcaac tgatcacaag tcttggcctt 600
246 caggagtttg acattgccag gaacgttcta gaactgatct atgcacaaac tctggtgtgg 660
247 attggcatct tcttctgccc cctgctgccc tttatccaaa tgattatgct tttcatcatg 720
248 ttctactcca aaaatatcag cctgatgatg aatttccagc ctccgagcaa agcctggcgg 780
249 gcctcacaga tgatgaactt cttcatcttc ttgctctttt tcccatcttt caccggggtc 840
250 ttgtgcaccc tggccatcac catctggaga ttgaagcctt cagctgactg tggccctttt 900
251 cgaggtctgc ctctcttcat tcactccatc tacagctgga tcgacaccct aagtacacgg 960
252 cctggctacc tgtgggttgt ttggatctat cggaacctca ttggaagtgt gcacttcttt 1020
253 ttcatcctca cctcatttgt gctgatcatc acctatcttt actggcagat cacagaggga 1080
254 aggaagatta tgataaggct gctccatgag cagatcatta atgagggcaa agataaaatg 1140
255 ttctgatag aaaaattgat caagctgcag gatatggaga agaaagcaaa cccagctca 1200
256 cttgttctgg aaaggagaga ggtggagcaa caaggctttt tgcatttggg ggaacatgat 1260
257 ggcagtcttg acttgcgatc tagaagatca gttcaagaag gtaatccaag ggcctgatga 1320
258 ctcttttggg aaccagacac caatcaaata aggggaggag atgaaaatgg aatgatttct 1380
259 tccatgccac ctgtgccttt aggaactgcc cagaagaaaa tccaaggctt tagccaggag 1440
260 cggaaactga ctaccatgta attatcaaag taaaattggg cattccatgc tatttttaat 1500
261 acctggattg ctgatttttc aagacaaaat acttgggggt ttccaataaa gattgttgta 1560
262 atattgaaat gagcctacaa aaacctagga agagataact aggaataat gtatattatc 1620

```

VERIFICATION SUMMARY

DATE: 04/29/2002

PATENT APPLICATION: US/10/089,783

TIME: 12:02:49

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\04292002\J089783.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date